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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TRAN, ELLEN C

ART UNIT PAPER NUMBER

2134

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/540,611

Applicant(s)

ELLISON ET AL.

Examiner

Ellen C Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 61-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 61-90 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/18/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communication: 26 November 2004, with an original filing date of 31 March 2000.
2. Claims 1-60 have been canceled by amendment. Claims 61-90 have been added.
3. Claims 61-90 are currently pending in this application. Claims 61, 71, and 81 are independent claims.

Response to Arguments

4. Applicant's arguments with respect to anticipated rejection have been considered but are not persuasive.

With respect to applicant's first argument on page 12, "Carloganu says nothing about determining whether a command involves access to memory". The Office disagrees this argument does not carry much weight. A memory is inherent in a processor, resource, or module which Carloganu controls the access to.

With respect to applicant's second argument on page 12, "Carloganu also says nothing about disallowing transactions, based on the type of memory area to be accessed and the current setting of the processor". The Office disagrees see '749 col. 2, lines 35-67. In this passage Carloganu explains the procedures for operating a set of control resources under the control of a secure processor. Also in the passage Carloganu states: "command primitive associated with the command code in each of the secured commands is then executed if and only if" this passage has the same meaning as disallowing transactions.

With respect to applicant's argument on page 12, that Carloganu does not teach "allows access to the isolated memory area when the processor is set to operate in the isolated execution

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mode and prevents access to the isolated memory are when the process is not set to operate in the isolated execution mode”. The Office disagrees see ‘749 col. 2, lines 13-31. Which explain how access to secure resources is only allowed when using predefined commands. In addition see ‘749 col. 10, lines 12-26 “The security model can also process regular (or free) commands when a secured command turns off the security of the system to allow free access to secured resources”.

With respect to applicant’s argument on page 12, that Carlogaunu does not teach “that the processor (a) creates an isolated memory area in the memory of the processing system, based at least in part on configuration parameters for the isolated memory area, and (b) determines whether the transaction request access to the isolated memory area, based at least in part on (i) access information for the transaction and (ii) one or more of the configuration parameters for the isolated area”. The Office disagrees Carloganu teaches these limitation see col. 3, line 30 through col. 4, line 15. This passage explains how secure resources (i.e. same as secure memory) are defined (i.e. same as creates).

With respect to applicant’s argument on page 12, that Carloganu does not teach “(a) the processor comprises a processor control register to store an isolated execution mode setting, and (b) the processor determines whether the processor is set to operate in the isolated execution mode, based at least in part on the isolated execution mode setting from the processor control register”. The Office disagrees this is shown in ‘749 col. 8, lines 34-67 in which the format and Seq_ID (i.e. same meaning as “mode setting” and “register”) are explained.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language

6. Claims 61-90 are rejected under 35 U.S.C. 102(e) as being anticipated by Carloganu et al. U.S. Patent No. 6,226,749 (hereinafter ‘749).

As to independent claim 61, “A method comprising: detecting a transaction that requests access to a memory of a processing system” is taught in ‘749 col. 4, lines 44-63;

“wherein the processing system comprises a processor that can be set to operate in a normal execution mode and, alternatively, to operate in an isolated execution mode” is shown in ‘749 col. 3, lines 30-59;

“and disallowing the transaction if the transaction requests access to an isolated memory area of the processing system and the processor is not set to operate in the isolated execution mode” is disclosed in ‘749 col. 1, lines 36-67 and col. 10, lines 12-26.

As to dependent claim 62, “wherein: the operation of disallowing the transaction comprises preventing access to the isolated memory area when the processor is not set to operate in the isolated execution mode; and the method further comprises allowing access to the isolated memory area when the processor is set to operate in the isolated execution mode” is taught in ‘749 col. 10, lines 12-26.

As to dependent claim 63, “further comprising: creating the isolated memory area in the memory of the processing system, based at least in part on configuration parameters for defining the isolated memory area” is shown in ‘749 col. 3, line 30 through col. 4, line 13.

As to dependent claim 64, “further comprising: creating the isolated memory area in the memory of the processing system, based at least in part on configuration parameters for the isolated memory area; and determining whether the transaction requests access to the isolated memory area, based at least in part on access information for the transaction and one or more of the configuration parameters for the isolated memory area” is disclosed in ‘749 col. 4, lines 44-63.

As to dependent claim 65, “comprising: determining whether the processor is set to operate in the isolated execution mode, based at least in part on an isolated execution mode setting for the processor” is taught in ‘749 col. 5, lines 1-30.

As to dependent claim 66, “wherein: the processor comprises a processor control register to store an isolated execution mode setting; and the method comprises determining whether the processor is set to operate in the isolated execution mode, based at least in part on the isolated execution mode setting from the processor control register” is shown in ‘749 col. 8, lines 34-67.

As to dependent claim 67, “further comprising: allowing the transaction to succeed if the processor is set to operate in the isolated execution mode” is disclosed in ‘749 col. 9, lines 20-39.

As to dependent claim 68, “further comprising: if the processor is set to operate in the isolated execution mode, asserting a signal from the processor to grant access for the transaction” is taught in is shown in ‘749 col. 9, lines 20-39.

As to dependent claim 69, “wherein: the transaction that requests access to the memory of the processing system comprises an access transaction generated during execution of an instruction in the processor” is disclosed in ‘749 col. 7, lines 33-42.

As to dependent claim 70. A method according to claim 61, wherein: the transaction that requests access to the memory of the processing system comprises an access transaction involving one or more resources selected from the group consisting of: a front side bus (FSB); and a translation lookaside buffer (TLB)” is taught in ‘749 col. 4, lines 44-67 and col. 9, lines 57-67.

As to independent claim 71, this claim is direct to an apparatus of the method of claim 61; therefore it is rejected along similar rationale.

As to dependent claims 72-80, these claims contain substantially similar subject matter as claim 62-70; therefore they are rejected along similar rationale.

As to independent claim 81, this claim is direct to the processing system of the method of claim 61; therefore it is rejected along similar rationale.

As to dependent claims 82-90, these claims contain substantially similar subject matter as claim 62-70; therefore they are rejected along similar rationale.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen C Tran whose telephone number is (571) 272-3842. The examiner can normally be reached from 6:30 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A Morse can be reached on (571) 272-3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ellen. Tran
Patent Examiner
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26 February 2005



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